Course Number and Name

BEC4L1 - ELECTRONIC CIRCUIT DESIGN LAB

Credits and Contact Hours

2 and 45

Course Coordinator's Name

Ms K.Subbulakshmi

Text Books and References

Lab Manual

Course Description

- To gain hands on experience in designing electronic circuits.
- To learn simulation software used in circuit design.
- To learn the fundamental principles of amplifier ,Oscillator and multivibrator circuits
- Construct waveform generation circuits

Prerequisites	Co-requisites
BEC3L1-Electronics Devices and circuit Lab	BEC402-Electronics Circuits

required, elective, or selected elective (as per Table 5-1)

required

Course Outcomes (COs)

CO1: Analyse the characteristics of amplifiers.

CO2 : Analyse the characteristics of Oscillators.

CO3 : Analyse the characteristics of Multivibrators.

CO4 : Analyse the characteristics of tuned amplifiers.

CO5: Analyse the frequency response of amplifiers using pSpice.

CO6 : Model the design of electronic circuits using PSpice.

Student Outcomes (SOs) from Criterion 3 covered by this Course COs/SOs b d Ε f G а С h i k CO1 Н Н Н Μ Μ Н Н L CO2 Н Μ Μ Μ Μ CO3 Μ Μ Н Н CO4 Μ Μ CO5 Η Μ CO6 L Н Н Н Н Μ Μ Μ

List of Topics Covered

LIST OF EXPERIMENTS

- 1.Feedback amplifier
- 2. Transistor phase shift oscillator
- 3. Class A single tuned amplifier
- 4. LC Oscillators
- 5. Collector coupled and Emitter coupled Astable multivibrator
- 6. Wein bridge oscillator
- 7. Schmitt Trigger
- 8. Emitter coupled bistable multivibrator
- 9. Monostable multivibrator
- 10. Class C tuned amplifier

SIMULATION USINGSPICE:

- 11. Frequency response of CE amplifier with Emitterresistance.
- 12.DC response of CS amplifier
- 13. Frequency response of Cascade amplifier.
- 14. Transfer Characteristics of Class B Power Amplifier